

NOTES

DAZED AND CONFUSED: REVAMPING THE SEC'S UNPREDICTABLE CALCULATION OF CIVIL PENALTIES IN THE TECHNOLOGICAL ERA

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ABSTRACT

Twenty-first-century problems cannot be solved with twentieth-century solutions. This applies with particular force to securities regulation, in which regulators must constantly adapt to rapid financial innovation. In an era of high-frequency trading and unprecedented market connectivity, the SEC has struggled to apply its existing regulatory framework. Specifically, the Commission's tiered civil-penalty regime—a remnant of the 1990 Penny Stock Reform Act—is outdated and presents a number of challenges as applied to sophisticated trading violations. Primarily, the current structure, which allows Administrative Law Judges to punish financial misconduct for each illegal “act or omission” that has occurred, permits excessive discretion to impose monetary penalties and can result in varying penalty amounts. This lack of predictability introduces too much uncertainty into market behavior and also accelerates settlement rates, depriving industry members of valuable precedent. Punishing for each “act or omission” can also be an improper proxy for the severity of a particular offense, such as when a single act causes severe damage to market confidence. This Note argues that Congress should alter this outdated tier structure in favor of a gain-based penalty system, which would reduce variability and more accurately punish wrongdoing.

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[†] Duke University School of Law, J.D. expected 2020; Emory University's Goizueta Business School, B.B.A. 2015. Many thanks to Professor Rebecca Rich and the members of the Duke Law Scholarly Writing Workshop, whose insightful comments and guidance on early drafts made this Note possible. I am also grateful for the tireless editing efforts of my dedicated peers at the *Duke Law Journal*. And last but not least, thank you to Lily and my family for their continued love and support.

INTRODUCTION

In October 2014, Athena Capital, a New York–based trading firm, agreed to pay a \$1 million penalty to settle charges in what the U.S. Securities and Exchange Commission (“SEC”) called the first-ever high-frequency trading manipulation case.¹

Athena used an algorithmic trading model to “mark the close”² of securities in its portfolio.³ Marking the close entails purchasing a large portion of a stock’s outstanding securities at the tail end of a trading period to boost reported trading volume, which in turn artificially inflates the share’s closing price and pads the value of the actor’s holdings before the market has an opportunity to correct itself.⁴ This process is illegal under the Dodd-Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank”)⁵ and also constitutes a “manipulative” practice under Rule 10b-5 of the Securities Exchange Act of 1934.⁶ Athena’s algorithm allowed it to engage in tens of thousands of these transactions in the final seconds of each trading day for six straight months.⁷

1. Press Release, U.S. Sec. & Exch. Comm’n, SEC Charges New York-Based High Frequency Trading Firm with Fraudulent Trading to Manipulate Closing Prices (Oct. 16, 2014) [hereinafter Press Release, U.S. Sec. & Exch. Comm’n], <https://www.sec.gov/news/press-release/2014-229> [<https://perma.cc/HX7D-ALPR>]. As part of the settlement, Athena did not have to admit to any wrongdoing. *Id.*

2. This practice is also referred to as “painting the tape” or “banging the close.” Peter J. Henning, *Markets Evolve, as Does Financial Fraud*, N.Y. TIMES (Nov. 11, 2013, 7:01 AM), <https://dealbook.nytimes.com/2013/11/11/markets-evolve-as-does-financial-fraud> [<https://perma.cc/693X-KCYG>].

3. Press Release, U.S. Sec. & Exch. Comm’n, *supra* note 1.

4. Gregory Scopino, *The (Questionable) Legality of High-Speed “Pinging” and “Front Running” in the Futures Markets*, 47 CONN. L. REV. 607, 648 n.180 (2015).

5. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 747, 124 Stat. 1376, 1739 (2010) (codified at 7 U.S.C. § 6c(a) (2018)); Scopino, *supra* note 4, at 645.

6. Rule 10b-5 is the linchpin of SEC fraud enforcement actions. *See* 15 U.S.C. § 78j (2018) (prohibiting manipulative and deceptive devices); *see also* Thomas Lee Hazen, *Identifying the Duty Prohibiting Outsider Trading on Material Nonpublic Information*, 61 HASTINGS L.J. 881, 889 (2010) (“Rule 10b-5 is generally acknowledged as designed to prevent fraud and deception in connection with securities trades.”).

7. Press Release, U.S. Sec. & Exch. Comm’n, *supra* note 1. In a separate but fascinating point, there is an ongoing debate as to whether manipulation that is achieved through trading alone should be considered illegal. *See also* Merritt B. Fox, Lawrence R. Glosten & Gabriel V. Rautenberg, *Stock Market Manipulation and Its Regulation*, 35 YALE J. ON REG. 67, 69 (2018) (offering an analytical framework to answer the complex question of “[w]hether trading activity alone can ever be considered illegal manipulation under federal law” (emphasis omitted)). *See generally* Gina-Gail S. Fletcher, *Legitimate Yet Manipulative: The Conundrum of Open-Market*

Although the case settled, the Athena trades raise interesting questions for future cases with regard to the calculation of SEC civil penalties in an era of high-frequency trading and rapid market responses.⁸ Because the existing penalty framework permits one maximum penalty amount for each “act or omission” in violation of the securities laws,⁹ and because Administrative Law Judges (“ALJs”) can broadly interpret the definition of “act or omission” when setting penalty amounts in SEC proceedings,¹⁰ the maximum conceivable penalty in a case such as Athena’s is virtually limitless.¹¹

Some background on SEC civil penalties will help illustrate the dynamic. A civil penalty is a monetary fine the SEC imposes on those who violate the securities laws. It is a key weapon in the Commission’s arsenal of sanctions, along with disgorgement of ill-gotten gains and industry bars.¹² But the civil penalty’s use and importance have increased over time, growing in tandem with the SEC’s authority to impose such sanctions.¹³ Although penalty amounts have dropped during the Trump administration,¹⁴ the total penalties imposed in 2017 nonetheless reached over \$830 million,¹⁵ compared to \$43 million in 2000.¹⁶

Congress first granted the SEC the ability to impose fines in 1984 through the Insider Trading Sanctions Act, but the Commission’s

Manipulation, 68 DUKE L.J. 481 (2018) (arguing that the SEC should emphasize harm to the market as the distinguishing factor between legal and illegal open-market transactions).

8. See *infra* Part II.B (discussing the finance industry’s infatuation with responsiveness and connectivity).

9. 15 U.S.C. § 77h-1(g).

10. See *infra* notes 74–79 and accompanying text.

11. See *infra* Part I (describing the process and authority by which ALJs issue penalties and the differing interpretations of the “act or omission” language).

12. See 15 U.S.C. § 77h-1(e)–(g) (enumerating some of the key sanctions available to the SEC).

13. See *infra* Part I.A (describing this historical development).

14. See Ben Protess, Robert Gebeloff & Danielle Ivory, *Trump Administration Spares Corporate Wrongdoers Billions in Penalties*, N.Y. TIMES (Nov. 3, 2018), <https://www.nytimes.com/2018/11/03/us/trump-sec-doj-corporate-penalties.html> [<https://perma.cc/3T52-B7AS>] (describing a 52 percent drop in financial penalties imposed by the SEC—including fines and disgorgement—between the Obama administration and the Trump administration).

15. U.S. SEC. & EXCH. COMM’N, DIVISION OF ENFORCEMENT ANNUAL REPORT 8 (2017), <https://www.sec.gov/files/enforcement-annual-report-2017.pdf> [<https://perma.cc/2R69-5GV3>] (comparing total penalty amounts in 2016 and 2017). This number is down from around \$1.3 billion in 2016. *Id.*

16. U.S. SEC. & EXCH. COMM’N, ANNUAL REPORT 1 (2000), <https://www.sec.gov/pdf/annrep00/ar00full.pdf> [<https://perma.cc/ZDG42BKS>].

authority was limited to seeking penalties only for insider trading.¹⁷ The scope of the SEC's civil-penalty authority steadily grew, however, culminating in the Dodd-Frank Act's articulation of the current framework.¹⁸ Dodd-Frank grants the SEC free rein to impose monetary penalties on anyone who "is violating or has violated" any federal securities law, with the lone criterion that the penalty be "in the public interest."¹⁹ Federal courts review penalty amounts with an "extraordinarily deferential" standard.²⁰ The only true check on the SEC's discretion is the penalty limits enumerated by Congress, which establish a maximum fine for each "act or omission" that violates one of the securities laws.²¹ The maximum amounts are organized by tiers that vary with the severity of the violation, ranging from \$7,500 to \$150,000 for persons and from \$75,000 to \$725,000 for other entities.²² This framework is a remnant of the Penny Stock Reform Act of 1990.²³

The maximum-penalty tiers are likely meant to be a check to reduce the chances of an overly burdensome punishment and ensure proportionality between the transgression and the penalty.²⁴ However, the interpretation of the "act or omission" language has been construed by the SEC and its ALJs in a number of different ways, which can expand or shrink penalty amounts drastically and can bypass the requirements of the penalty tiers. Other authors have identified the differing interpretations of the language; practitioner Jon Eisenberg, for example, compiled a useful set of recent cases to portray the

17. Insider Trading Sanctions Act of 1984, Pub. L. No. 98-376, 98 Stat. 1264 (codified in scattered sections of 15 U.S.C.).

18. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 929P, 124 Stat. 1376, 1871 (2010) (codified at 15 U.S.C. § 77h-1 (2018)).

19. 15 U.S.C. § 77h-1(g). The "in the public interest" language has taken on its own doctrine and does act as a limitation on the total amount of penalties. *See infra* notes 85–86 and accompanying text.

20. *See Rapoport v. SEC*, 682 F.3d 98, 107 (D.C. Cir. 2012) ("SEC sanctions are not to be disturbed unless they are 'unwarranted in law or . . . without justification in fact.'" (omission in original) (quoting *Butz v. Glover Livestock Comm'n Co.*, 411 U.S. 182, 185–86 (1973))).

21. 15 U.S.C. § 77h-1(g)(2).

22. *Id.* These numbers are for violations of the Securities Act of 1933; *see also* 15 U.S.C. § 78u-2 (establishing similarly structured penalties with slightly different amounts in the corresponding provision of the Securities Exchange Act of 1934).

23. *Compare* Securities Enforcement Remedies and Penny Stock Reform Act of 1990, 101 Pub. L. No. 429, 104 Stat. 931 (codified in scattered sections of 15 U.S.C.) (establishing a tiered structure for penalties), *with* Dodd-Frank Wall Street Reform and Consumer Protection Act § 929P (same).

24. S. REP. NO. 101-337, at 12 (1990) (describing the tier structure as a response to concerns that "without further limitation, the maximum penalty amounts could be imposed for minor, inadvertent violations that did not cause significant harm").

variations.²⁵ ALJs have interpreted each “act or omission” to mean, *inter alia*, the number of investors injured by the conduct, the number of distinct acts of negligence, and the duration of the misconduct.²⁶ In applying Dodd-Frank to Athena Capital, for example, an ALJ could have interpreted a single “act or omission” to be each trade, each day of trading, or the scheme as a whole.

Some commentators believe that *Rapoport v. SEC*²⁷ and *Collins v. SEC*²⁸ have the potential to limit the agency’s discretion.²⁹ In *Rapoport*, the U.S. Court of Appeals for the D.C. Circuit denied a penalty based on the number of years a fraud was ongoing.³⁰ In *Collins*, the D.C. Circuit, despite declining to find that a penalty was arbitrary and capricious, articulated that the process for making such a determination is a review of sanctions in prior similar cases.³¹ However, these cases appear to have had little impact on the SEC’s sanctioning policy and merely force the Commission to link each violation to the “act or omission” language superficially.³²

This Note will argue that the current framework grants too much discretion to ALJs in setting penalty amounts and that the problems arising from that discretion will be exacerbated by technological developments in the industry. Instead, Congress should consider a new statutory framework that bases penalties on the total amount of gain earned through misconduct. Although there is an ongoing, heated debate about the constitutionality of the SEC’s ALJs and the level of autonomy and authority granted to them in general under Dodd-Frank,³³ the arguments in this Note will focus solely on the policy

25. Jonathan N. Eisenberg, *Calculating SEC Civil Money Penalties*, HARV. L. SCH. F. CORP. GOVERNANCE & FIN. REG. (Jan. 24, 2016) [hereinafter Eisenberg, *Calculating SEC Civil Money Penalties*], <https://corpgov.law.harvard.edu/2016/01/24/calculating-sec-civil-money-penalties> [http://perma.cc/GAY6-BUJ9].

26. *Id.*; see also *infra* notes 74–79 and accompanying text (exploring these alternatives in slightly greater detail).

27. *Rapoport v. SEC*, 682 F.3d 98 (D.C. Cir. 2012).

28. *Collins v. SEC*, 736 F.3d 521 (D.C. Cir. 2013).

29. See, e.g., Eisenberg, *Calculating SEC Civil Money Penalties*, *supra* note 25.

30. *Rapoport*, 682 F.3d at 108.

31. *Collins*, 736 F.3d at 526.

32. See *infra* Section I.C (evaluating the minimal impact that *Rapoport* had on interpretive discretion).

33. See generally Alexander I. Platt, *SEC Administrative Proceedings: Backlash and Reform*, 71 BUS. LAW. 1 (2015) (describing some of the constitutional arguments against ALJ authority). A recent case, *Lucia v. SEC*, 138 S. Ct. 2044 (2018), declared the process of nominating ALJs unconstitutional under the Appointments Clause. *Id.* at 2054–55. While the case catalyzed important changes to the process through which ALJs are appointed, it did nothing to stymie their

concerns of the current penalty regime. Furthermore, there is a robust and growing literature on the proper way to penalize corporate malfeasance.³⁴ This Note aims to supplement that commentary but with an emphasis on securities violations.

Part I of this Note will describe the background and history of the SEC's authority to impose penalties, as well as the current framework the Commission applies and the various ways ALJs have interpreted the statute. Part II will explore various challenges presented by an unpredictable and varied interpretive framework. First, unpredictable judgments prohibit parties from properly weighing the potential risks of their conduct, especially in cases where the Commission should be concerned with overdeterrence of conduct beneficial to the industry. Incoherent amounts might also contribute to a higher settlement rate, which deprives the public of valuable administrative precedent and impedes the development of the law. Furthermore, the statutory language is inadequate in providing guidance to the Commission for violations involving high-frequency trading and other modern forms of market manipulation. These modern frauds defy the language for a number of reasons. Because fraud through high-frequency trading includes thousands of "acts or omissions," ALJs can functionally disregard the tier requirements mandated by Congress. Conversely, because the market is "too linked to fail,"³⁵ even one egregious act can cause extreme damage to the market and warrants more than a single maximum-tier penalty.

Part III will propose alternative solutions to this growing issue. Any change must appropriately weigh the desire for flexibility in administrative proceedings with the need for uniformity and predictability in the enforcement process. The SEC could adopt interpretive guidance that dictates how ALJs should treat the "act or omission" language in different scenarios. A more effective change, however, would be a new gain-based statutory framework, which would not only be easy to implement and administer but would also

actual authority. *See id.* (holding only that SEC ALJs are "Officers of the United States" and thus subject to the Appointments Clause).

34. *See generally*, e.g., Miriam H. Baer, *Sorting Out White-Collar Crime*, 97 TEX. L. REV. 225 (2018) (critiquing the lack of appropriate gradation in federal criminal punishments).

35. Tom C.W. Lin, *The New Market Manipulation*, 66 EMORY L.J. 1253, 1274 (2017) [hereinafter Lin, *New Market Manipulation*] [hereinafter Lin, *New Investor*] ("[T]he new financial reality's heavy emphasis on connectivity has created the systemic risk of 'too linked to fail.'" (quoting Tom C.W. Lin, *The New Investor*, 60 UCLA L. Rev. 678, 714–16 (2013))).

result in predictable penalty amounts that more closely mirror the severity of the wrongdoing.

I. THE SEC, CIVIL PENALTIES, AND APPROACHES TO INTERPRETATION

The SEC's enforcement authority has not been static; it has slowly developed since the Commission's creation in 1934. And although the Commission now has the go-ahead from Congress to fine any violator of the securities laws, the vagaries of the penalty framework have resulted in a variety of divergent calculation methodologies when imposing such fines. ALJs use this wide discretion—which often remains unchecked by judicial or administrative mechanisms—to set total penalty amounts as they see fit, sometimes incompatibly with the tier framework. This Part will trace the history of SEC authority to impose penalties, describe the various ways in which modern ALJs interpret the statutory language, and then briefly discuss some attempts by federal judges to reduce the variability of penalty amounts.

A. *The History and Authority of SEC Administrative Proceedings*

In response to the 2008 financial crisis, Congress passed the Dodd-Frank Act, a far-reaching statute that expanded governmental oversight of Wall Street practices and aimed to protect consumers from abusive tactics.³⁶ Dodd-Frank in part granted the SEC enormous authority in § 929P(a) to adjudicate securities cases through internal agency proceedings and set remedies and sanctions without suing in federal court.³⁷ This is considered by some to be the most important grant of authority to the agency in its history.³⁸ The inclusion of § 929P(a) was likely an attempt to streamline the enforcement process while reducing expenditures of federal resources.³⁹

36. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010) (codified in scattered sections of the U.S. Code).

37. *Id.* § 929P(a). For the full text of the statute, see *infra* note 55.

38. See, e.g., Gideon Mark, *SEC and CFTC Administrative Proceedings*, 19 U. PA. J. CONST. L. 45, 50–51 (2016) (“This was the most significant expansion of the SEC’s authority to use administrative enforcement in its more than eighty-year history.”).

39. See *id.* at 51 (“The scant legislative history indicates that the SEC and Congress primarily hoped to enhance the Division’s efficiency—and administrative enforcement generally is both quicker and less expensive” (footnotes omitted)).

The SEC has not always had authority to hold its own proceedings and impose such broad sanctions.⁴⁰ Originally, the Commission had to bring a civil action in federal district court to obtain penalties for any violation.⁴¹ The civil monetary penalty was not even available to the SEC as a remedy between 1934, when the SEC was created, and 1984.⁴²

The SEC's ability to seek civil penalties began with the Insider Trading Sanctions Act of 1984,⁴³ followed by the Insider Trading and Securities Fraud Enforcement Act of 1988.⁴⁴ However, these civil penalty schemes lacked the expansive characteristics that are typical of the SEC's current remedial authority. For instance, the Commission's ability to seek penalties was limited in scope, applying only to insider-trading violations, and any penalty action needed to be brought in federal court.⁴⁵ Additionally, the fines under these early acts were capped at treble penalties, or three times the amount of gain or damages.⁴⁶ The Securities Enforcement Remedies and Penny Stock Reform Act of 1990 represented a huge jump in power, permitting SEC penalties for violations of any of the four major securities acts.⁴⁷ The key difference between the 1990 legislation and Dodd-Frank is that in the earlier Act, the Commission could only hold administrative proceedings against regulated entities, such as those registered with the SEC.⁴⁸ Also, penalties in court proceedings differed slightly from

40. See *id.* at 46 (observing that the SEC's civil-enforcement powers were limited before Dodd-Frank).

41. Insider Trading and Securities Fraud Enforcement Act of 1988, Pub. L. No. 100-704, § 3(a), 102 Stat. 4677, 4677 (codified at 15 U.S.C. 78u-1 (2018)); Jon Eisenberg, *Making Sense of SEC Civil Money Penalties*, LAW360 (Mar. 4, 2014, 2:24 PM) [hereinafter Eisenberg, *Making Sense of SEC Civil Money Penalties*], <https://www.law360.com/articles/512850/making-sense-of-sec-civil-money-penalties> [<https://perma.cc/622P-W5QY>].

42. Eisenberg, *Making Sense of SEC Civil Money Penalties*, *supra* note 41.

43. Insider Trading Sanctions Act of 1984, Pub. L. No. 98-376, 98 Stat. 1264 (codified in scattered sections of 15 U.S.C.).

44. Insider Trading and Securities Fraud Enforcement Act of 1988, Pub. L. No. 100-704, 102 Stat. 4677 (codified in scattered sections of 15 U.S.C.).

45. *Id.* § 3(a).

46. Arthur B. Laby & W. Hardy Callcott, *Patterns of SEC Enforcement Under the 1990 Remedies Act: Civil Money Penalties*, 58 ALB. L. REV. 5, 8 (1994); see also Insider Trading and Securities Fraud Enforcement Act of 1988 § 3(a) ("The amount of the penalty . . . shall not exceed three times the profit gained or loss avoided as a result of such unlawful [conduct].").

47. Securities Enforcement Remedies and Penny Stock Reform Act of 1990, 101 Pub. L. No. 101-429, 104 Stat. 931 (codified in scattered sections of 15 U.S.C.). The four major securities acts described are the Securities Act of 1933, the Securities Exchange Act of 1934, the Investment Company Act of 1940, and the Investment Advisors Act of 1940. *Id.*

48. Urska Velikonja, *Are the SEC's Administrative Law Judges Biased? An Empirical Investigation*, 92 WASH. L. REV. 315, 322-23 (2017) [hereinafter Velikonja, *Empirical*

internal actions; they did not follow the same tiered system but were capped at the amount of pecuniary gain or harm.⁴⁹

Although Dodd-Frank is the final and current iteration of the SEC's civil-enforcement authority, it did not vary the tier structure from the 1990 Act. According to Dodd-Frank, the Commission can commence a "cease-and-desist proceeding," adjudicated by agency-appointed ALJs, which considers whether a person or corporation has violated any securities law.⁵⁰ Upon determination that a violation has occurred—or is about to occur—the SEC can order the individual or entity to "cease and desist" from committing further violations and can impose sanctions and remedies on the defendants.⁵¹ The three most impactful and commonly used remedies are: (1) disgorgement, which forces the defendant to return any profits gained through the illicit conduct;⁵² (2) industry bars, in which the SEC can stop a wrongdoer from working in finance for a given duration—or indefinitely;⁵³ and (3) civil monetary penalties.⁵⁴

Most relevant to this Note is the Commission's authority to issue civil penalties, an example of which can be seen in 15 U.S.C. § 77h-1(g).⁵⁵ Disgorgement and civil penalties at first glance seem to be very

Investigation]; see also *id.* at 322 ("[Section 929P(a)] streamlines the SEC's existing enforcement authorities by permitting the SEC to seek civil money penalties in cease-and-desist proceedings under Federal securities laws." (quoting H.R. REP. NO. 111-687, § 211, at 78 (2009))).

49. S. REP. NO. 101-337, at 13 (1990) ("The same tiering of penalties applies to court proceedings, with one major difference: within each tier, the maximum penalty is the greater of the dollar amount specific or the gross amount of pecuniary gain to the defendant as a result of the violation."). This difference still exists today. See 15 U.S.C. § 77t(d)(2) (2018) (establishing the same distinction within each tier).

50. 15 U.S.C. § 77h-1(a).

51. *Id.* § 77h-1(e)–(g). Also, the SEC currently has "almost unlimited discretion" in deciding whether to adjudicate a case as an administrative proceeding or in federal court. Mark, *supra* note 38, at 57–58. For reference, in the first half of 2016, the SEC adjudicated 88 percent of its cases as administrative proceedings. *Id.* at 46–47.

52. 15 U.S.C. § 77h-1(e).

53. *Id.* § 77h-1(f).

54. *Id.* § 77h-1(g); see also Davis M. Becker, *What More Can Be Done To Deter Violations of the Federal Securities Laws?*, 90 TEX. L. REV. 1849, 1852 ("As is well known, the remedies available to the SEC for securities laws violations include injunctions and other court orders, disgorgement of ill-gotten gains, and civil penalties.").

55. 15 U.S.C. § 77h-1(g). The statute reads:

Authority to impose money penalties

(1) *Grounds* In any cease-and-desist proceeding under subsection (a), the Commission may impose a civil penalty on a person if the Commission finds, on the record, after notice and opportunity for hearing, that—

(A) such person—

similar, requiring the defendant to pay a lump sum fine. But disgorgement is about restitution and unjust enrichment—funds paid through disgorgement are often returned to victims through a “fair fund”⁵⁶—whereas the civil penalty is an additional fine that focuses on deterrence and punishment.⁵⁷ Moreover, the amount to be returned in disgorgement must be calculated exactly, tracing accurately which profits were ill-gotten.⁵⁸ Conversely, calculating civil penalties is a much more discretionary process, and the ultimate sanction amount is reserved for determination by the ALJ or federal judge and is based

(i) is violating or has violated any provision of this subchapter [15 U.S.C. §§ 77a et seq.], or any rule or regulation issued under this subchapter [15 U.S.C. §§ 77a et seq.]; or

(ii) is or was a cause of the violation of any provision of this subchapter [15 U.S.C. §§ 77a et seq.], or any rule or regulation thereunder; and

(B) such penalty is in the public interest.

(2) *Maximum amount of penalty*

(A) *First tier* The maximum amount of a penalty for each act or omission described in paragraph (1) shall be \$7,500 for a natural person or \$75,000 for any other person.

(B) *Second tier* Notwithstanding subparagraph (A), the maximum amount of penalty for each such act or omission shall be \$75,000 for a natural person or \$375,000 for any other person, if the act or omission described in paragraph (1) involved fraud, deceit, manipulation, or deliberate or reckless disregard of a regulatory requirement.

(C) *Third tier* Notwithstanding subparagraphs (A) and (B), the maximum amount of penalty for each such act or omission shall be \$150,000 for a natural person or \$725,000 for any other person, if—

(i) the act or omission described in paragraph (1) involved fraud, deceit, manipulation, or deliberate or reckless disregard of a regulatory requirement; and

(ii) such act or omission directly or indirectly resulted in—

(I) substantial losses or created a significant risk of substantial losses to other persons; or

(II) substantial pecuniary gain to the person who committed the act or omission.

(3) *Evidence concerning ability to pay* In any proceeding in which the Commission may impose a penalty under this section, a respondent may present evidence of the ability of the respondent to pay such penalty. The Commission may, in its discretion, consider such evidence in determining whether such penalty is in the public interest. Such evidence may relate to the extent of the ability of the respondent to continue in business and the collectability of a penalty, taking into account any other claims of the United States or third parties upon the assets of the respondent and the amount of the assets of the respondent.

Id.

56. Urska Velikonja, *Public Compensation for Private Harm: Evidence from the SEC's Fair Fund Distributions*, 67 STAN. L. REV. 331, 332–33 (2015).

57. See *infra* note 113 and accompanying text (discussing administrative goals of punishment).

58. See *SEC v. First City Fin. Corp.*, 890 F.2d 1215, 1231 (D.C. Cir. 1989) (“Since disgorgement primarily serves to prevent unjust enrichment, the court may exercise its equitable power only over property causally related to the wrongdoing.”).

on an assessment of the facts. Defendants can appeal ALJ decisions to federal court, but the standard is “extraordinarily deferential.”⁵⁹ Furthermore, many defendants charged by the SEC often settle prior to adjudication.⁶⁰

To initiate an administrative proceeding and issue sanctions, all that is required is that the Commission issue an Order Instituting Proceedings, which in sum need only include a “simple statement of the alleged violation.”⁶¹ What follows is a hearing adjudicated by an ALJ, who can issue subpoenas on any relevant party and is not bound by the Federal Rules of Evidence.⁶² Once the hearing is initiated, the ALJ may impose a fine as long as it adheres to the statutory requirements and is in the “public interest.”⁶³ The ALJ’s opinion and findings are then released in a written opinion.⁶⁴

The legislative history of the 1990 Act does indicate that SEC civil penalties were designed to increase agency flexibility in enforcement.⁶⁵ But flexibility should not necessarily imply unfettered discretion. This Note does not claim that ALJs are acting outside of the scope of their authority when they articulate varying interpretations of what constitutes a single “act or omission”; it merely questions the prudence of allowing such discretion in an acts-based system. The adoption of the penalty tiers was an affirmative choice by Congress, which indicates that it anticipated some degree of limitation on penalty amounts.⁶⁶ However, in the current system, described in greater detail in the next Section, the Commission can basically bypass those limitations with the amount of discretion it exhibits.

59. *Rapoport v. SEC*, 682 F.3d 98, 107 (D.C. Cir. 2012); *see also id.* at 103 (“[W]e must uphold the Commission’s legal conclusions unless they are ‘arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.’” (quoting 5 U.S.C. § 706(2)(A))).

60. *See Velikonja, Empirical Investigation*, *supra* note 48, at 347 (aggregating data from 2007–2015 to find that only 2.2 percent of defendants litigated their cases to trial during that time period).

61. JAMES D. COX, ROBERT W. HILLMAN & DONALD C. LANGEVOORT, *SECURITIES REGULATION: CASES AND MATERIALS* 835 (8th ed. 2017).

62. *Id.*

63. *Id.*

64. *Id.* at 836.

65. *See S. REP. NO. 101-337*, at 9–10 (1990) (“The authority provided by [the Act] will give the SEC and the courts the flexibility to better tailor a remedy to the facts and circumstances of the violation.”); *id.* at 12 (“[T]he Committee believed that, in practice, [within each tier,] the courts and the SEC would administer the new penalties fairly . . .”).

66. In fact, an alternative system without tiers was expressly proposed and rejected. *Id.* at 12 (noting that the initial legislation had only a single tier).

B. *Calculating Civil Penalties*

When assessing penalties, ALJs look first to the tier system, which is the heart of Dodd-Frank's penalty clause. Congress laid out a maximum penalty amount for each "act or omission" that violates securities laws.⁶⁷ The tiers are organized into three separate categories of increasing severity. The third and highest tier, which allows for a maximum penalty of \$150,000 for persons and \$725,000 for corporate entities, is reserved for violations involving fraud, deceit, or reckless disregard of a regulatory requirement that result in either substantial gain for the defendant or substantial loss for other investors.⁶⁸ A second-tier violation, with maximums of \$75,000 for persons and \$375,000 for corporate entities, does not require the substantial gain or loss factor of the third tier, but it still must involve fraud, deceit, or reckless disregard.⁶⁹ The first tier, which has a \$7,500 maximum for persons and a \$75,000 maximum for corporate entities, is essentially a residual category for any violation that does not feature fraud, deceit, or reckless disregard of a regulatory requirement.⁷⁰ However, the tiers merely set out a maximum punishment allowable under the law; the SEC can set penalties within each tier at its discretion.

The adjudicator then "must determine how many violations occurred and how many violations are attributable to each person, as the statute instructs."⁷¹ Each violation is multiplied by an amount the judge deems appropriate for each act, with the statutory tiers acting as a ceiling.⁷² In court proceedings—as opposed to internal adjudications in front of ALJs—federal judges are allowed to increase the total penalty up to the amount of pecuniary harm or gain if the tier structure results in too low of a penalty.⁷³

ALJs have interpreted an "act or omission" to mean a number of different things. The number of "acts or omissions" present in any illegal scheme could be measured by the number of illegal

67. 15 U.S.C. § 77h-1(g) (2018). See *supra* note 55 for the full text of the statute.

68. 15 U.S.C. § 77h-1(g).

69. *Id.*

70. *Id.* The SEC adjusts these numbers as inflation requires. U.S. SEC. & EXCH. COMM'N, INFLATION ADJUSTMENTS TO THE CIVIL MONETARY PENALTIES ADMINISTERED BY THE SECURITIES AND EXCHANGE COMMISSION (Jan. 15, 2019), <https://www.sec.gov/enforce/civil-penalties-inflation-adjustments.htm> [<https://perma.cc/LM23-S69N>].

71. *Rapoport v. SEC*, 682 F.3d 98, 108 (D.C. Cir. 2012).

72. 15 U.S.C. § 77h-1(g).

73. *Id.* § 77t(d). Insider-trading violations have their own penalties, which are capped at three times the gain earned or loss avoided. *Id.* § 78u-1.

transactions,⁷⁴ the number of investors injured,⁷⁵ the number of fraudulent statements made to investors,⁷⁶ the number of distinct acts of negligence,⁷⁷ or the duration of the fraud.⁷⁸ Alternatively, the adjudicator could consolidate multiple distinct acts into what commentators call a “course of conduct.”⁷⁹ Essentially, the discretion afforded to the adjudicator in determining what constitutes an “act or omission” allows him or her to reverse-engineer an appropriate penalty amount by manipulating the statutory language to fit the calculation.

The tiers for general violations serve as a check on ALJs, but in practice, any intention by Congress to limit discretion is defeated by illegal conduct that entails a large number of individual acts. A prime example of the malleability and meaninglessness of the “act or omission” standard is *In re optionsXpress, Inc.*⁸⁰ There, a clearinghouse failed to comply with the requirement that it rectify, or “close out,” any position in which it failed to deliver securities that it had contracted to sell to customers.⁸¹ The Commission credited the expert testimony that

74. See *infra* notes 81–84 and accompanying text.

75. See George N. Krinos, Initial Decision Release No. 929, 113 SEC Docket 679, at *23 (ALJ Dec. 21, 2015) (considering a number of different options for what constitutes an act, but deciding arbitrarily “that nineteen violations, based on each investor whom [the defendant] defrauded as a result of his misconduct, is a reasonable unit of assessing penalties”); see also Walter V. Gerasimowicz, Initial Decision Release No. 496, 106 SEC Docket 3639, at *7 (ALJ July 12, 2013) (“The events at issue will be considered as thirteen courses of action, one for each investor in [Respondents’ fund] harmed by Respondents’ fraudulent conduct.”).

76. See Total Wealth Mgmt., Inc., Initial Decision Release No. 860, 112 SEC Docket 1345, at *45

(ALJ Aug. 17, 2015) (“Instead, I calculate violations based on the number of [the defendant’s disclosure forms] in which material misstatements were made.”).

77. Thomas R. Delaney II, Initial Decision Release No. 755, 109 SEC Docket 962, at *62 (ALJ Mar. 18, 2015) (equating each act of negligent oversight to a single violation).

78. See J.S. Oliver Capital Mgmt., L.P., Securities Act Release No. 10100, Exchange Act Release No. 78098, Investment Advisers Act Release No. 4431, Investment Company Act Release No. 32152, 114 SEC Docket 1855, at *29–30 (June 17, 2016) (upholding an ALJ determination that at least eighteen separate violations occurred—one for each month the fraud continued). The Commission in this case specifically addressed the concern in *Rapoport*, but it allowed a durational calculation because it corresponded to the number of violations. *Id.* at *25–28.

79. See Eisenberg, *Calculating SEC Civil Money Penalties*, *supra* note 25; see also Reliance Fin. Advisors, LLC, Initial Decision Release No. 941, 113 SEC Docket 1355, at *26 (ALJ Jan. 11, 2016) (grouping penalties into “categories” of violations and imposing a penalty of \$125,000 for each category); David B. Havanich, Jr., Initial Decision Release No. 935, 113 SEC Docket 1039, at *12 (ALJ Jan. 4, 2016) (finding that operating as an unregistered broker-dealer for two years “will be considered as one course of action” for the purpose of setting fines).

80. optionsXpress, Inc., Securities Act Release No. 10125, Exchange Act Release No. 78621, 114 SEC Docket 4786 (Aug. 18, 2016).

81. *Id.* at *4.

optionsXpress failed to deliver these securities according to regulation approximately 1,200 times.⁸² It accordingly bypassed the maximum tier and affirmed the ALJ's total penalty of \$2 million.⁸³ This comes out to around \$1,666 for each act, though the Commission declined to articulate how it arrived at that number. Although the SEC determined that optionsXpress's conduct fell within the third tier because it "acted in deliberate and reckless disregard of its regulatory obligations over a prolonged period," even after explicit guidance from regulators as to the conduct's illegality, the discussion was moot, and the tiers themselves were irrelevant, because the amount per act fell well below even the first-tier maximum.⁸⁴

There are some other criteria that help ALJs determine an appropriate penalty, but those are similarly subjective and flexible. For example, when deciding the penalty amount within each tier, and when assessing the total fine, statutory provisions require that the adjudicators must also consider whether the penalty is "in the public interest."⁸⁵ In addition to statutory criteria that a judge *may* assess when establishing this determination,⁸⁶ judges may also consider:

- (1) the egregiousness of the violations at issue, (2) defendants' scienter (3) the repeated nature of the violations, (4) defendants' failure to admit to their wrongdoing; (5) whether defendants' conduct created substantial losses or the risk of substantial losses to other persons; (6) defendants' lack of cooperation and honesty with authorities, if any; and (7) whether the penalty that would otherwise be appropriate should be reduced due to defendants' demonstrated current and future financial condition.⁸⁷

Some ALJs have adopted other unofficial rules, such as not issuing a penalty that exceeds the amount of disgorgement.⁸⁸ This is likely a

82. *Id.* at *55.

83. *Id.* at *58.

84. *Id.* at *54.

85. 15 U.S.C. § 77h-1(g)(1)(B) (2018).

86. *Id.* § 80a-9(d)(3).

87. Ambassador Capital Mgmt., Initial Decision Release No. 672, 108 SEC Docket 2637, at *76 (ALJ Sept. 19, 2014) (quoting SEC v. Lybrand, 281 F. Supp. 2d 726, 730 (S.D.N.Y. 2003), *aff'd*, 425 F.3d 143 (2d Cir. 2005)).

88. See Newbridge Sec. Corp., Initial Decision Release No. 380, 96 SEC Docket 241, at *72 (ALJ June 9, 2009) ("Civil penalties in a higher amount [than the defendants' pecuniary gain] are not consistent with the public interest."). But see J.S. Oliver Capital Mgmt., L.P., Securities Act Release No. 10100, Exchange Act Release No. 78098, Investment Advisers Act Release No. 4431, Investment Company Act Release No. 32152 (June 17, 2016), *supra* note 78, at *2 (finding that the Commission is not constrained by that informal rule).

continuation of earlier SEC penalty frameworks, in which the amount of harm or gain was used as a cap on penalty amounts, or an imputation of the federal court penalty structure which has the same cap.⁸⁹

C. Courts' Ineffective Attempts to Address Penalty Disparities

Commentators point to two cases that have the potential to limit the variability and unpredictability of penalty amounts: *Rapoport v. SEC* and *Collins v. SEC*. These cases certainly trend in the right direction by attempting to curb the discretion afforded to judges and ALJs in imposing penalties, but in practice, they do very little to provide actual structure or predictability to penalty calculations.

1. *Rapoport v. SEC*. The D.C. Circuit briefly addressed the varying interpretations of “act or omission” in the 2012 case *Rapoport v. SEC*.⁹⁰ There, the SEC charged Dan Rapoport for failing to appropriately register himself and his Russia-based trading firm as a foreign broker-dealer before soliciting institutional investors.⁹¹ Rapoport failed to respond to the initial order, and the ALJ entered a default order against Rapoport and imposed sanctions accordingly, including a civil monetary penalty of \$315,000.⁹² The ALJ calculated that amount by imposing a maximum second-tier penalty for every year that Rapoport operated unregistered.⁹³ The circuit court vacated the penalty because the ALJ failed to follow the language set by statute, which requires that the judge determine “how many violations occurred.”⁹⁴ It found that using the number of years did not equate to the number of violations.⁹⁵

Some commentators believed that *Rapoport* could rein in the discretion of the court.⁹⁶ However, its holding on penalties is very narrow. All it requires is that an ALJ justify its amount using the “act

89. See, e.g., *supra* notes 46, 49, and 73 and accompanying text.

90. *Rapoport v. SEC*, 682 F.3d 98, 108 (D.C. Cir. 2012).

91. *Id.* at 99–100.

92. *Id.* at 101–02.

93. *Id.* at 108.

94. *Id.*

95. *Id.* Other ALJs, even after *Rapoport*, have held that a durational-based analysis is appropriate in certain circumstances. See *supra* note 78.

96. See Eisenberg, *Calculating SEC Civil Money Penalties*, *supra* note 25 (“It is not clear whether all of these decisions would survive appellate scrutiny [after *Rapoport*].”).

or omission” language.⁹⁷ Even the court in *Rapoport* acknowledges that the standard for reviewing penalties is “extraordinarily deferential.”⁹⁸ The court did state at one point that “agencies must apply their rules consistently . . . [and] may not depart from their precedent without explaining why,” but that was in regard to the underlying substantive claim, not the penalty calculation.⁹⁹ It is unlikely that the court meant to imply that ALJs must pick just one interpretation of “act or omission.”

And any value of *Rapoport* has clearly been ignored or read on the narrowest grounds by ALJs; in 2016, four years after *Rapoport*, the Commission cited a D.C. Circuit case from 2004 that stated the SEC is “not obligated to make [its] sanctions uniform.”¹⁰⁰ Despite *Rapoport*’s purported influence, ALJs retain a substantial amount of power to set penalties.¹⁰¹ No appellate court has overturned a penalty based on *Rapoport*.¹⁰²

2. *Collins v. SEC.* *Collins v. SEC* offers a different way to restrain ALJ discretion. The case suggests that if a court finds that the penalty is arbitrary and capricious, then the total penalty should be limited in some manner.¹⁰³ There, the D.C. Circuit again opined that the ratio of the civil penalty to the value of disgorgement could be an informative—although not decisive—determinant of the appropriateness of a penalty.¹⁰⁴ *Collins* could provide some relief for defendants by placing an upper bound on penalties. Although the case

97. See *Rapoport*, 682 F.3d at 108 (“To impose second-tier penalties, the Commission must determine how many violations occurred and how many violations are attributable to each person, as the statute instructs.”).

98. *Id.* at 107.

99. *Id.* at 104.

100. J.S. Oliver Capital Mgmt., L.P., Securities Act Release No. 10100, Exchange Act Release No. 78098, Investment Advisers Act Release No. 4431, Investment Company Act Release No. 32152 (June 17, 2016), *supra* note 78, at *20 (June 17, 2016) (quoting *Geiger v. SEC*, 363 F.3d 481, 488 (D.C. Cir. 2004)).

101. See *supra* notes 74–79 and accompanying text (describing the different methods ALJs have used in post-*Rapoport* cases).

102. As of June 2, 2019, Lexis Advance lists six cases that cite to *Rapoport*, and not one of the courts uses it as grounds for overturning a penalty based on the calculation methodology. For a list of these cases, see <https://tinyurl.com/y2ff24n8> [<https://perma.cc/VPE3-SUC7>] (citing Decisions for *Rapoport v. SEC*, 682 F.3d 98, LEXIS ADVANCE RESEARCH, <https://tinyurl.com/y2ff24n8> [<https://perma.cc/VPE3-SUC7>]).

103. See *Collins v. SEC*, 736 F.3d 521, 524–26 (D.C. Cir. 2013) (considering but ultimately rejecting an argument that an SEC penalty was arbitrary and capricious under 5 U.S.C. § 706(2)(A)).

104. *Id.* at 526.

is aimed at establishing a reasonable penalty cap, it does not grapple with the “act or omission” language and does little to provide guidance on how to calculate a penalty within the acceptable range accurately and objectively. The court even recognized that precedent ranges from penalties equaling disgorgement to penalties twenty-five times disgorgement.¹⁰⁵ And the precedent-driven approach does not help with new and innovative conduct for which there is no baseline to compare.

* * *

As demonstrated, the use of civil penalties has expanded drastically over the years.¹⁰⁶ Due to upheaval surrounding the SEC’s authority to seek disgorgement,¹⁰⁷ the Commission might begin to seek more monetary penalties, although downward pressure from the Trump administration might keep the number down overall in the short term.¹⁰⁸ Given this potential increase in the use of civil monetary fines, resolution of the penalty framework becomes all the more pertinent.

Ultimately, judicial review can do very little to force more structure into a statutory system that has only fed into regulators’ discretion and ability to issue penalties. The following Parts will describe in greater detail some of the major policy concerns with such a system.

105. *Id.* at 525.

106. *See supra* notes 14–16 and accompanying text (describing the increase in penalty amounts over time). This expansion is probably primarily driven by the ever-growing latitude given to the SEC by Congress, and the ease through which penalties can be assessed in-house at the SEC rather than in court. *See Mark, supra* note 38, at 50–51 (confirming the growing number of cases the SEC adjudicates internally, especially after Dodd-Frank).

107. *See, e.g.,* Patrick L. Butler, Note, *Saving Disgorgement from Itself: SEC Enforcement After Kokesh v. SEC*, 68 DUKE L.J. 333, 351–55 (2018) (analyzing *Kokesh v. SEC*, 137 S. Ct. 1635 (2017), an opinion that seemed to limit the SEC’s authority to issue disgorgement). Much of the federal courts’ powers to authorize disgorgement comes from equitable principles; *Kokesh* casts doubt on whether disgorgement is in fact an equitable remedy, or whether it actually looks substantially like a penalty, which would require statutory authority to impose. *Id.* at 354. This author posits that such uncertainty could cause the SEC to seek penalties under the existing structure rather than risk seeking disgorgement and have it overturned later on.

108. *See supra* note 14 and accompanying text (chronicling the decline in penalty amounts during Trump’s presidency). This drop is probably a function of President Trump’s general deregulatory agenda and a shift in his political priorities. *See* Protess, Gebeloff & Ivory, *supra* note 14 (“The decline in corporate penalties from the Justice Department may partly reflect the Trump administration’s heavier emphasis on immigration, violent crime and drugs.”).

II. PROBLEMS WITH AN ACT-BASED CALCULATION

Excessive discretion in imposing penalties presents a number of challenges. First, Section A of this Part will explore how penalty amounts that vary greatly introduce uncertainty into the conduct of industry members. Section B describes how this discretion to interpret what constitutes an “act or omission” will become an increasingly prevalent problem with the advent of algorithmic trading systems, which will contribute to the incoherence of penalty amounts.

A. *The Economics of Punishment*

An adjudicator’s unchecked discretion to impose civil penalties as he or she sees fit can have a negative impact on the market in two critical ways. First, unfettered discretion decreases the predictability of penalty amounts, potentially overdetering certain actors. Second, it can incentivize settlement in a larger amount of cases. Though settlement is generally a beneficial mechanism in the judicial system, oversettlement in novel or impactful cases can potentially rob actors of important and useful precedent. Each of these potential disadvantages to unchecked discretion in penalty awards is explored more fully below.

1. *Predictability and Overdeterrence.* The SEC’s lack of uniformity in applying the Dodd-Frank penalty framework introduces unnecessary uncertainty into the market and might be harmful to the financial sector and society in general. Although uncertainty might itself deter intentional fraudsters or other egregious actors, the Dodd-Frank penalty regime covers all wrongdoing, both intentional and unintentional.¹⁰⁹ The Commission should consider the impact of uncertainty on behavior that falls on the borderline of legality, potentially resulting in the overdeterrence of some socially beneficial behavior.

Economic analysis pervades the regulatory decision-making process.¹¹⁰ Agencies must constantly consider whether regulating a

109. See 15 U.S.C. § 77h-1(g) (2018) (granting the SEC power to authorize penalties for *any* person that “is violating or has violated any provision of [the Securities Act of 1933],” not just intentional violations).

110. See Mariano-Florentino Cuéllar & Jerry L. Mashaw, *Regulatory Decision-Making and Economic Analysis*, in 3 THE OXFORD HANDBOOK OF LAW AND ECONOMICS 59, 60–61 (Francesco Parisi ed., 2017) [hereinafter OXFORD HANDBOOK OF LAW AND ECONOMICS] (exploring various ways in which regulators use economic analysis to control risk).

certain group or certain conduct meets the economic cost-benefit justification. This is especially true in the enforcement context, where regulators must determine whether the cost of detection and investigation truly warrants agency action.¹¹¹ Cost-benefit analysis is equally relevant in ascertaining appropriate punishments for violations of those regulations.¹¹² Under a traditional deterrence model of punishment—which is a central justification for SEC fines¹¹³—penalties induce compliance with laws by forcing wrongdoers to internalize the societal harm of their actions.¹¹⁴

Central to the economic analysis of deterrence is the impact of disincentives on behavior.¹¹⁵ The main philosophy underlying agency actions is that firms—and people—are rational profit maximizers.¹¹⁶ In a nutshell, this theory postulates that when considering whether to move forward with conduct, a firm will compare the perceived benefit of noncompliance with the potential downside of acting.¹¹⁷ If the benefit is greater than the risk—calculated by multiplying the resulting punishment with the probability of detection—it will choose to violate.¹¹⁸ In order to deter the conduct, then, an agency has to set a penalty that makes the punishment greater than any benefit.¹¹⁹ And deterrence penalties do more than just curb intentional misbehavior;

111. *Id.*

112. See Max Minzner, *Why Agencies Punish*, 53 WM. & MARY L. REV. 853, 860–62 (2012) (examining the economic approach to agency punishment).

113. See Walter V. Gerasimowicz, Initial Decision Release No. 496, 106 SEC Docket 3639, at *7 (ALJ July 12, 2013) (“Penalties in addition to the other sanctions ordered are necessary for the purpose of deterrence.”); see also Public Statement, Jay Clayton, Chairman, SEC, Statement Regarding Agreed Settlements with Elon Musk and Tesla (Sept. 29, 2018), https://www.sec.gov/news/public-statement/clayton-settlements-elon-musk-and-tesla#_ftn1 [<https://perma.cc/JD4F-K78V>] (“At the Commission . . . we seek to serve [the interests of ordinary investors] to the extent practicable while also ensuring that we remediate and deter misconduct. In addition, holding individuals accountable is important and an effective means of deterrence.”).

114. Minzner, *supra* note 112, at 856.

115. See Isaac Ehrlich, *Economics of Criminal Law: Crime and Punishment*, in OXFORD HANDBOOK OF LAW AND ECONOMICS, *supra* note 110, at 295, 297 (characterizing the basic deterrence model by syllogism: “People respond to incentives. Offenders are people too. Therefore, by transitive logic, offenders respond to incentives”).

116. Timothy F. Malloy, *Regulation, Compliance and the Firm*, 76 TEMP. L. REV. 451, 453–54 (2003).

117. *Id.* at 461–62. Although this is a simplistic, assumption-based model, scholars have found that the deterrence model is more effective in agency law than in tort and criminal law because agencies control the entire enforcement process. Minzner, *supra* note 112, at 915–16.

118. Minzner, *supra* note 112, at 860.

119. The agency may do this by requiring disgorgement, which automatically offsets any gain. See *supra* note 52 and accompanying text. Any additional civil penalty, then, is in furtherance of this goal of deterrence.

they can also influence behavior that occurs unintentionally by incentivizing an actor to invest in so-called “self-monitoring” policies to mitigate the possibility of a violation.¹²⁰

But regulatory bodies can choose to what degree they want to deter wrongful conduct. In a “complete deterrence” model, deterrence is the sole imperative. Penalties are set as high as possible with the singular goal of stopping the behavior.¹²¹ Although there are certain types of intolerable conduct that warrant complete deterrence, such as pure fraud and murder, an “optimal deterrence” model is more appropriate under most circumstances involving “less-than-absolutely undesirable activities.”¹²² That theory stipulates that penalties should not be just an arbitrary number greater than the gain earned through noncompliance. Instead, they should be at a level at which the net social benefit from the violation exceeds the net social costs.¹²³

Agencies have multiple competing goals in their regulatory mandates aside from deterrence, and they should consequently operate in an “optimal deterrence” framework. The SEC, for example, aside from deterring bad behavior, must also ensure that markets are running smoothly and effectively to facilitate capital formation.¹²⁴ The SEC should therefore implement a punishment model that helps it meet those goals when setting penalty amounts.

The risk of using a heavier hand than necessary in inducing compliance is the worry known as “overdeterrence,” which occurs when penalties are higher than optimal. This “could create excessive incentives to avoid harm and could thus overdeter socially desirable conduct.”¹²⁵ Though excessive punishment can lead to overdeterrence,

120. Robert D. Cooter, *Punitive Damages, Social Norms, and Economic Analysis*, 60 LAW & CONTEMP. PROBS. 73, 88 (1997) [hereinafter Cooter, *Punitive Damages*]; see also Robert D. Cooter, *Economic Analysis of Punitive Damages*, 56 S. CAL. L. REV. 79, 86 (1982) (“When punitive damages are imposed for unintentional fault, the cost of making errors increases, causing injurers to invest more in avoiding mistakes.”). This was a part of the rationale for the original 1990 Act. See Laby & Callcott, *supra* note 46, at 11 (“[Richard Breeden, the former SEC chairman who proposed the 1990 legislation,] argued that the prospect of economic sanctions would cause institutions to allocate more resources to achieve compliance. Breeden urged that this rationale applied even as to non-intentional misconduct, such as record-keeping and customer protection violations.” (footnote omitted)).

121. Minzner, *supra* note 112, at 880–81.

122. Alex Raskolnikov, *Probabilistic Compliance*, 34 YALE J. ON REG. 491, 542 (2017).

123. Minzner, *supra* note 112, at 860.

124. *Our Goals*, U.S. SEC. & EXCH. COMM’N (Oct. 16, 2018), <https://www.sec.gov/our-goals> [<https://perma.cc/R3Q6-639N>].

125. A. Douglas Melamed, *Damages, Deterrence, and Antitrust—A Comment on Cooter*, 60 L. & CONTEMP. PROBS. 93, 93–94 (1997). If the line between a procompetitive information

so can legal uncertainty. Behavior that results in unintentional violations is where uncertainty can be the most detrimental.¹²⁶ Overdeterrence is most likely to occur in cases where “the location of the line between desirable and undesirable—between liability and no liability—is uncertain.”¹²⁷

Unpredictable punishments can result in overdeterrence in the same way that legal uncertainty does. Predictability is a fundamental aspect of the enforcement process. Because the amount of the fine is an important variable in the risk–reward dichotomy, if a party cannot properly determine what the fine will be, it cannot properly weigh risk. Civil penalties, then, can have an overdeterrent effect if they are issued arbitrarily and unpredictably. In the context of judicial punitive damages, commentators have long established the need for predictable and consistent penalties.¹²⁸ Uncertain penalties may therefore similarly chill innovative behavior that could have a net benefit to society and can lead to an inefficient allocation of investment in compliance programs.

Moreover, the line between legal and illegal conduct can blur when new technologies develop that do not fit the statutory mold, just adding another layer of uncertainty to the mix. An area in which overdeterrence is a more pressing concern is the injection of smart technology into the financial sector, which increases efficiency and value for market participants.¹²⁹ Financial models and algorithms allow consumers to have greater access to the capital markets and information about their investments and can help investors allocate and manage risk.¹³⁰ The adoption and implementation of new technologies could be inhibited by the uncertainty—both legal and punitive—inherent in the regulation of these innovations.¹³¹ These are developments that financial regulators need to foster, not deter.

exchange and an anticompetitive, illegal information sharing scheme is uncertain, and the consequences unclear, then the desirable behavior could be deterred. *See id.* at 94 (giving the example of a procompetitive information exchange among a trade association).

126. *Id.* at 93.

127. *Id.*

128. *See Cooter, Punitive Damages, supra* note 120, at 74 (“Inconsistent awards of punitive damages muddle the message conveyed by the courts concerning the seriousness of the wrong.”).

129. Lin, *New Investor, supra* note 35, at 687–93.

130. *Id.* at 699–700.

131. Other scholars have already identified this issue and are trying to mitigate it from a regulatory perspective. *See generally* Chris Brummer & Yesha Yadav, *Fintech and the Innovation Trilemma*, 107 GEO. L.J. 235 (2019) (proposing a new framework through which policymakers should view the tradeoff between innovation and regulation).

The Congressional Research Service (“CRS”) even released a 2019 report that highlighted the growing regulatory uncertainty in a variety of financial-technology contexts.¹³² Such uncertainty “can negatively affect many different stakeholders” and thus “policymakers may consider ways to . . . integrate fintech into the regulatory framework.”¹³³ One area of regulatory uncertainty the CRS identified is robo-advisers.¹³⁴ Robo-advisers are “online financial product[s] that provide[] automated, algorithm-based wealth management services” and can offer cheap, active investment management for consumers without the high fees generally associated with a human adviser.¹³⁵ This enhances the ability of underserved communities, who cannot normally invest, to participate in the markets.¹³⁶ But legal uncertainty surrounding developers’ liability, duties, and potential punishment under the Advisers Act might stymie additional investment in these types of low-cost, easy-access investing tools.¹³⁷

2. *The Influence of Unpredictability on Settlement Economics.*

Next, unpredictability in how ALJs will penalize a party in an official proceeding reinforces a system of widespread settlement that is already prevalent in the industry.¹³⁸ Settlement economics is an imperative part of litigation strategy.¹³⁹ A rational defendant will choose to settle if the settlement amount is less than the liability expected in litigation, which can be calculated by multiplying the probability of a litigation loss by the expected judgment and adding the total expected costs of legal

132. See generally CONG. RESEARCH SERV., FINANCIAL INNOVATION: REDUCING FINTECH REGULATORY UNCERTAINTY (2019), <https://crsreports.congress.gov/product/pdf/IF/IF11195> [<https://perma.cc/SX83-Q8A6>].

133. *Id.* at *1.

134. *Id.*

135. Bret E. Strzelczyk, Note, *Rise of the Machines: The Legal Implications for Investor Protection with the Rise of Robo-Advisors*, 16 DEPAUL BUS. & COMM. L.J. 54, 56 (2017). Robo-advisers are predicted to be managing \$2 trillion in assets by 2020. *Id.* at 62–63.

136. *Id.* at 83–84 (“These robo-advisors . . . mean[] that non-typical investors in rural areas, minorities, and youthful investors now have access to investing and can better plan for retirement.”).

137. See *id.* at 63 (arguing that the Advisers Act is incapable of addressing robo-adviser issues and that the resulting legal uncertainty may “negatively impact . . . the industry’s innovative solutions for providing services to lower income clients and other fixed income trading”).

138. See *supra* note 60 and accompanying text.

139. See Jennifer K. Robbennolt, *Litigation and Settlement*, in THE OXFORD HANDBOOK OF BEHAVIORAL ECONOMICS AND THE LAW 623, 624 (Eyal Zamir & Doron Teichman eds., 2014) (establishing the standard economic model employed by litigants when deciding whether to settle).

representation.¹⁴⁰ In the same way that uncertainty warps the calculus of a rational actor choosing to engage in illegal behavior, uncertainty as to the judgment similarly alters how a litigant views a settlement deal by clouding the expected value calculations of proceeding to trial.

Settlement in general is good for the court system.¹⁴¹ In the agency context, it can reduce administrative costs and more efficiently stretch agency resources.¹⁴² However, settlements make more sense when being negotiated between “equal parties.”¹⁴³ This balance of power is lacking in the SEC’s cases, mostly because “[t]he SEC sits as the primary drafter, interpreter, and rule and regulation enforcer, and claims various moral, intellectual, political, or economic legitimacy.”¹⁴⁴ Even in cases against large, sophisticated, and wealthy parties, the SEC’s coercive power still exists, in part due to the reputational harm that an agency action can inflict.¹⁴⁵ The ability to reinterpret what constitutes an “act or omission” only serves to amplify this power. As a result, “settlement with the SEC does not look like a negotiated settlement,” because the SEC’s leverage allows it to aggressively pursue the same sanctions as it would in a formal adjudication.¹⁴⁶

SEC settlements in the context of such power might not be in the public interest. For example, novel cases—which presumably come with the greatest chance of settlement since the litigation risk is so high—are actually cases that society should want to go through to adjudication because it will help set SEC precedent for new sorts of violations.¹⁴⁷ There is an inherent tension between settlement and precedent creation, and public interest demands a balance between the

140. *Id.*

141. See Danné L. Johnson, *SEC Settlement: Agency Self-Interest or Public Interest*, 12 FORDHAM J. CORP. & FIN. L. 627, 651 (2007) (explaining that private settlements reduce the number of trials).

142. See *id.* at 669–70 (noting that the SEC has a self-interest in settlements because it allows the agency to conserve resources).

143. See *id.* at 659 (describing how settlements between equal and similarly situated parties amount to a reflection of the will of both parties).

144. *Id.*

145. See *id.* at 664–65 (outlining the reputational and economic harm that follows SEC enforcement). This reputational harm is not just dignitary; SEC discipline can trigger “bad actor” clauses that “disqualify individuals and entities from taking advantage of exemptions and other regulatory dispensations,” such as beneficial, capital-raising safe harbors. COX ET AL., *supra* note 61, at 856.

146. Johnson, *supra* note 141, at 661.

147. See *id.* at 679 (describing the benefit of creating precedent from novel cases).

two.¹⁴⁸ “The loss of substantive law from the public realm [from too much settlement] distorts the legal landscape, limits public testing and debate of legal norms, and devalues or destroys institutional competencies.”¹⁴⁹ Furthermore, a dearth of precedent probably increases settlement rates because the lack of formal guidance means less clarity for litigants on vague legal standards, which in turn magnifies the unpredictability of proceeding to trial, creating a vicious cycle. And although settlements with the SEC end up in the public sphere as quasi-precedential press releases, these announcements lack the depth, clarity, and predictive strength of a true court or administrative opinion.

B. Applying the “Act or Omission” Language to Market Manipulation and High-Frequency Trading

The technological era has drastically altered the landscape of the financial markets, bringing an unprecedented level of information sharing and market connectivity. In particular, the advent of algorithmic trading models and high-frequency trading has allowed securities trading to occur at a speed and magnitude never before imagined. The Dodd-Frank penalty framework, which is largely an adoption of the 1990 Act, is ill-suited to combat these changes. This Section will briefly lay out common forms of market manipulation and how they have changed with new technology. Then, it will argue that these developments can lead to even greater incoherence in penalty amounts issued by the SEC.

1. *Market Manipulation Basics.* People have been attempting to manipulate the stock market since the invention of securities exchanges.¹⁵⁰ As early as the 1600s, brokers of the Amsterdam Stock Exchange would go to coffeehouses to spread false rumors about stocks and record fake transactions in order to raise prices.¹⁵¹ These are early versions of market manipulations, along with many other creative

148. Leandra Lederman, *Precedent Lost: Why Encourage Settlement, and Why Permit Non-Party Involvement in Settlements?*, 75 NOTRE DAME L. REV. 221, 256 (1999).

149. Rex R. Perschbacher & Debra Lyn Bassett, *The End of Law*, 84 B.U. L. REV. 1, 2 (2004).

150. See David J. Leinweber & Ananth N. Madhavan, *Three Hundred Years of Stock Market Manipulations*, 10 J. INVESTING 7, 8 (2001) (describing the rise of market manipulation, such as “painting the tape” and spreading false rumors, in the Amsterdam Stock Exchange in the 1600s).

151. *Id.*

methods that continue to be used today.¹⁵² The point of market manipulation is to “us[e] distortive market power, deceit, misinformation, and illicit information . . . to distort the natural price of certain financial instruments or transactions to the benefit of the manipulative party.”¹⁵³

Although the mechanics of specific types of market manipulation are outside the scope of this Note, some examples of manipulative practices will add context to the discussion.¹⁵⁴ One classic form of market manipulation is a “pump-and-dump” scheme, as dramatized by the Jordan Belfort biopic *The Wolf of Wall Street*.¹⁵⁵ A pump-and-dump is usually perpetrated by brokers and involves acquiring a position in a cheap stock—usually a penny stock¹⁵⁶—and then using aggressive tactics and false advertising about the underlying company to push up the price while unloading it on customers.¹⁵⁷ The brokers earn the difference on the inflated value—as well as high commissions on the sales—while the customers will be stuck with an investment that drops in value the moment the market realizes the shares are overpriced.¹⁵⁸

Spreading false rumors to increase the market price is a method of manipulation that is similar to the pump-and-dump, albeit different in scale. Elon Musk did this when he falsely tweeted that he would be taking Tesla private at \$420 a share, pushing the stock price up when there was little evidence to support the rumor.¹⁵⁹

Another category of market manipulation is the “wash sale.” This is the recording of fake transactions “with the goal of creating artificial

152. See Lin, *New Market Manipulation*, *supra* note 35, at 1281–82 (describing different types of traditional market manipulation).

153. *Id.* at 1281.

154. For a more in-depth discussion of these tactics, see generally *id.*

155. See *id.* at 1285 (referencing *THE WOLF OF WALL STREET* (Paramount Pictures 2013)).

156. A penny stock is a share of a small company with a low market capitalization, which accordingly has a low share price and is thinly traded. COX ET AL., *supra* note 61, at 1049. Penny stocks are often easy vehicles for fraud. See *id.* (“[F]ew doubt that the penny stock market is full of abuses . . .”).

157. *Id.*

158. *Id.*

159. Dave Michaels, Susan Pulliam, Tim Higgins & Michael Rapoport, *SEC Sues Elon Musk for Fraud, Seeks Removal from Tesla*, WALL ST. J. (Sept. 27, 2018, 10:37 PM), <https://www.wsj.com/articles/elon-musk-sued-by-the-sec-for-securities-fraud-1538079650> [<https://perma.cc/ZE67-L6P8>]. Musk later settled, agreeing to pay a \$20 million settlement and refrain from acting as chairman for three years. Mark H. Anderson & Dave Michaels, *Federal Judge Approves Elon Musk, Tesla Settlements with SEC*, WALL ST. J. (Oct. 16, 2018, 1:57 PM), <https://www.wsj.com/articles/federal-judge-approves-elon-musk-tesla-settlements-with-sec-1539699262> [<https://perma.cc/J7K7-BJCE>].

movements in volume and price in the marketplace.”¹⁶⁰ Because the market sees the volume of trading as an indication of high demand—or in some cases an adverse event—volume changes can influence stock prices.¹⁶¹ For example, someone could both buy and sell shares of the same security to create the illusion that demand has increased, when in fact the demand is a manufactured mirage.¹⁶² Once the market responds, the perpetrator sells the stock to lock in the gains before the price reverts.¹⁶³ Marking the close is similar to a wash sale, but it is targeted at the very end of the trading period.¹⁶⁴ Each of these methods violate Rule 10b-5’s ban on “manipulative” practices.¹⁶⁵

2. *The Evolution of Market Manipulation.* With the introduction of the internet, digitized exchanges, and high-frequency trading, market manipulation has become even more sophisticated and dangerous. The finance industry continues to place a “heavy emphasis on connectivity,” with information flowing to all parties instantaneously.¹⁶⁶ Proponents of the efficient market theory have long posited that the market’s response to information is fast and that any publicly available information is included in stock price.¹⁶⁷ But with modern technology, that response occurs in a flash. Essentially, it has become an efficient market on steroids.

One main factor contributing to these changes is that many traders now use computers and artificial intelligence to execute trades.¹⁶⁸ Coders create algorithms that are designed to perform certain functions, such as buying or selling securities, based on an array of preset criteria or assumptions that the trader chooses.¹⁶⁹ These

160. Lin, *New Market Manipulation*, *supra* note 35, at 1283.

161. *Id.* at 1283–84.

162. *Id.*

163. *Id.* at 1284.

164. *See supra* notes 3–6 and accompanying text.

165. *See supra* note 6 and accompanying text.

166. Lin, *New Market Manipulation*, *supra* note 35, at 1274.

167. *See West v. Prudential Sec., Inc.*, 282 F.3d 935, 938 (7th Cir. 2002) (“With many professional investors alert to news, markets are efficient in the sense that they rapidly adjust to all public information . . .”).

168. Lin, *New Investor*, *supra* note 35, at 689.

169. *Id.* These algorithms can be highly effective. For example:

Some algorithms may utilize historical troves of data to gauge past patterns of wins and losses, or survey current markets to figure out immediate trends for momentum-driven trading. Instructions also set limits on when an algorithm should stop trading. Sharp or sudden falls in market prices, unexpected events, or low payoffs may trigger a rapid exit from the market.

algorithms can react to market events much faster than humans ever could and “can process a deluge of information in real time, spot trends, and react accordingly within seconds.”¹⁷⁰ And because some of these financial models are coded to react to market trading, financial institutions have become, in the words of one commentator, “too linked to fail,” with any issues sending “ripple[s] across the system.”¹⁷¹ One example of this is the 2010 “Flash Crash,” in which \$1 trillion of market value was erased in a span of thirty minutes.¹⁷² The primary catalyst for the crash was a trader in his house engaged in a form of high-tech market manipulation.¹⁷³

The next step above algorithmic models is high-frequency trading, in which a computer can execute a large number of trades within milliseconds.¹⁷⁴ For investors whose livelihoods turn on the ability to act quickly to gain an “alpha”—an excess or abnormal return above the market¹⁷⁵—the invention of high-frequency trading was an inevitable development. The instant response time allows users to be “incredibly profitable,” but at the same time, these models have the potential to “exacerbate volatility” by reacting quickly and with magnitude to market events.¹⁷⁶

These developments in the financial industry make market manipulation easier to achieve and more systemically dangerous. Even the average investor is completely linked to market information systems via the internet and personal trading accounts.¹⁷⁷ Material

Yesha Yadav, *How Algorithmic Trading Undermines Efficiency in Capital Markets*, 68 VAND. L. REV. 1607, 1621 (2015) (footnote omitted). Algorithms can be coded to make trades based on any number of factors, such as market trends and crowd reactions, or based on highly technical criteria, such as statistical arbitrage or mean reversion. Shobhit Seth, *Basics of Algorithmic Trading: Concepts and Examples*, INVESTOPEDIA (May 4, 2019), <https://www.investopedia.com/articles/active-trading/101014/basics-algorithmic-trading-concepts-and-examples.asp> [<https://perma.cc/5GXV-TWRC>].

170. Lin, *New Investor*, *supra* note 35, at 690.

171. Lin, *New Market Manipulation*, *supra* note 35, at 1275.

172. *Id.* at 1260.

173. *Id.* at 1263. There is some debate as to whether the trader actually caused the damage or just acted as a catalyst, unveiling the underlying issues that resulted in the crash. Bob Pisani, *What Caused the Flash Crash? CFTC, DOJ Weigh in*, CNBC (Apr. 21, 2015, 5:45 PM), <https://www.cnbc.com/2015/04/21/what-caused-the-flash-crash-cftc-doj-weigh-in.html> [<https://perma.cc/Y3NZ-2ER2>].

174. Lin, *New Investor*, *supra* note 35, at 691.

175. *Alpha*, INVESTOPEDIA (May 3, 2019), <https://www.investopedia.com/terms/a/alpha.asp> [<https://perma.cc/AH9Q-99NT>].

176. Lin, *New Investor*, *supra* note 35, at 692.

177. *See id.* at 699 (“Investors today can receive high-quality, user-friendly investment information through television, radio, satellite radio, websites, social media tools, smartphone

market events show up on news feeds and social media within seconds of the event occurring, popping up on screens across the world. Instead of a false rumor reaching a select few, a tweet reaches millions of people in seconds.¹⁷⁸ Within two minutes of Elon Musk's post, Tesla shares had jumped 4 percent; within an hour, they had surged to 10 percent.¹⁷⁹ Alternatively, a false rumor can be injected into the market by much more subtle means. In 2017, the SEC charged Robert Murray with fraud after he filed a fake tender offer of Fitbit on EDGAR, the SEC regulatory filing portal.¹⁸⁰ Murray purchased a large number of Fitbit call options before the filing and profited off their sales when investors responded to the fake offer.¹⁸¹

Another area where these developments have grown in sophistication is in washed orders. In a tactic known as "spoofing," a party can submit a large number of buy or sell orders, either above or below the current market spread, which tricks the other algorithms into responding, effectively moving the stock price.¹⁸² The party then cancels the orders and can profit off the price swing.¹⁸³ Spoofing was the method of choice for Navinder Singh Sarao, the Flash Crash trader.¹⁸⁴

In 2017, in response to the danger presented by these developments, the SEC created a "Cyber Unit,"¹⁸⁵ so one can expect the Commission to grow its number of enforcement cases that include these types of crimes, exacerbating the issues associated with unpredictability. The Cyber Unit focuses on a number of technology-

applications, and other fora, customized to each investor's interests regardless of their wealth or connections.").

178. See Todd Leopold, *In Today's Warp-Speed World, Online Missteps Spread Faster than Ever*, CNN (Mar. 6, 2012, 7:14 AM), <https://www.cnn.com/2012/03/06/tech/social-media/misinformation-social-media/index.html> [<https://perma.cc/N9VK-HMQU>] (highlighting the speed at which information spreads through social media).

179. Kevin Dugan & Nicolas Vega, *Tesla Shares Rise 11 Percent After Musk's Shocking Tweet*, N.Y. POST (Aug. 7, 2018, 5:25 PM), <https://nypost.com/2018/08/07/tesla-shares-rise-11-percent-after-musks-shocking-tweet> [<https://perma.cc/J7RV-U7R8>].

180. Press Release, U.S. Sec. & Exch. Comm'n, SEC Charges Fake Filer with Manipulating Fitbit Stock (May 19, 2017), <https://www.sec.gov/news/press-release/2017-107> [<https://perma.cc/XA7S-CA27>].

181. *Id.*

182. Lin, *New Market Manipulation*, *supra* note 35, at 1289.

183. *Id.*

184. Pisani, *supra* note 173.

185. Press Release, U.S. Sec. & Exch. Comm'n, SEC Announces Enforcement Initiatives to Combat Cyber-Based Threats and Protect Retail Investors (Sept. 25, 2017), <https://www.sec.gov/news/press-release/2017-176> [<https://perma.cc/FCK4-K5SA>].

based violations, such as market manipulation via social media, hacking, initial coin offerings, and cyber threats to trading platforms,¹⁸⁶ all of which probably have minimal precedent to draw from to determine an appropriate penalty.

3. *Penalties for Market Manipulation.* In this new technological landscape, a penalty framework that was originally passed in 1990 loses any effectiveness and coherence it once had. Punitive damages in general are based on the perceived severity of the conduct, but that brings in the subjective views of both the judge and jury calculating them.¹⁸⁷ The penalty framework attempts to establish some layer of objectivity for ALJs' calculations, but it fails to do so.¹⁸⁸

Moreover, ALJs are forced to bypass Congress's statutory requirements in order to punish wrongdoers proportionately. For example, Elon Musk sent a single tweet that severely impacted the price of Tesla stock.¹⁸⁹ For now, consider this as a single "act" under Dodd-Frank.¹⁹⁰ Given how quickly the market responded and how fast the tweet was disseminated over the internet, it caused a huge degree of damage to investors. ALJs are statutorily bound, however, to cap the penalty at \$150,000, the largest individual penalty available in the highest tier of the statutory scheme.¹⁹¹ Although ALJs likely would find a way to bypass this, they would have to disregard their statutory mandate in order to do so. From the SEC's perspective, this might actually incentivize the Commission to settle so it does not have to be limited by the penalty caps in the statute. The penalty conundrum is only partially rectified by the SEC's ability to sue in federal court, in which a judge can increase the penalty up to the amount of pecuniary harm.¹⁹² But this route is also a drain on federal resources; administrative proceedings are much more efficient, and Congress likely granted the SEC the power to hold internal proceedings in order to avoid the agency having to go to federal court in the first place.

Of course, the Musk tweet raises the equally pressing question of how information passed through public internet forums should actually

186. *Id.*

187. See Cooter, *Punitive Damages*, *supra* note 120, at 76 ("Jury intuition about the extent of punishment provides an uncertain and unstable foundation for law.").

188. See *supra* Part I.B (discussing the statutory framework's malleability).

189. Dugan & Vega, *supra* note 179.

190. 15 U.S.C. § 77h-1(g).

191. *Id.*

192. See *id.* § 77t(d).

be treated. Is this a single “act,” or is it really millions of acts for every person the tweet went out to—as if Musk had sent each of them a faulty disclosure statement individually? Musk and his lawyers at the very least were nervous about this scenario, as they agreed to a settlement that included a \$20 million civil penalty.¹⁹³ Although he likely agreed to pay a higher amount in return for a reduced industry bar, the penalty is a far cry from \$150,000. This demonstrates just how much the per-violation statutory scheme is unable to reflect the realities of the modern market.

Even if Musk’s conduct was considered millions of smaller acts, this alternative scenario results in equally incoherent penalties. Consider a situation where a firm engages in fraud involving high-frequency trading, which used hundreds of thousands of faulty trades over an extended period of time. Did Congress really intend for each of these trades to be considered a single “act”? Congress did believe that ALJs would generally combat this issue by setting a low number for each act a firm engages in,¹⁹⁴ but it also actively placed the tier system in the calculation scheme.¹⁹⁵ It is therefore doubtful that Congress intended for an ALJ to be able to bypass the tiers completely—like in the *optionsXpress* case¹⁹⁶—by interpreting the language in such a way that he or she could select the lowest tier and then multiply that amount by an incredibly large number.¹⁹⁷ Such a backdoor calculation scheme effectively eliminates any potential cap on the penalty.

III. SWITCHING FROM A VIOLATION-BASED TO A GAIN-BASED MODEL

Any change to the method of calculating civil penalties would have to occur in one of two forms. The SEC could stick with the existing language, perhaps by issuing an interpretive rule that provides ALJs with guidance on how to handle the “act or omission” language. Attempting to establish a uniform definition of “act or omission,”

193. Anderson & Michaels, *supra* note 159.

194. See *supra* note 65 (noting that the SEC and courts have flexibility within each tier to administer fair penalties).

195. See *supra* notes 66–67 and accompanying text.

196. *optionsXpress, Inc.*, Securities Act Release No. 10125, Exchange Act Release No. 78621 (Aug. 18, 2016), *supra* note 80.

197. See *supra* notes 81–84 and accompanying text (discussing how the ALJ arrived at a large penalty by multiplying the tier determination by 1,200 individual acts).

however, would be a difficult exercise because, as demonstrated above, different types of fraud involve varying numbers of acts with similarly varying market impact. And any guidance directed at known issues will fail to address unforeseeable technological advancements. Instead, Congress should alter the very framework itself by changing the baseline criterion for penalty amounts, switching to a disgorgement- or revenue-based model.

A. Interpreting “Act or Omission”

In the modern context, a methodology that calculates penalties on a per-violation basis is untenable. Although there is a plethora of possible interpretations of the “act or omission” language,¹⁹⁸ none can effectively respond to every unique or new set of facts. No matter how an adjudicator interprets it, the number of acts is an incomplete proxy for the severity of a crime. Choosing just one of the existing interpretations will ultimately lead to a tradeoff along the uniformity–flexibility spectrum. And attempting to match up each type of conduct to a specific interpretation will lead to an overly rigid system incapable of handling new forms of misconduct. Although simply raising the tier maximums would seem to be an easy fix, it would only serve to increase ALJ discretion within each tier and perpetuate the problems identified in Part II.

For example, too much uniformity fails to address egregious conduct, especially in new types of cases. There are a few ways to create uniformity in the calculation of “act or omission.” Even packaging every act into a single “course of conduct,” which likely represents the highest degree of uniformity since most penalties would ultimately remain at or below a single-tier maximum, overcorrects the issues identified in this Note. Such an approach comes with a number of problems, which could potentially lead to underdeterrence of illegal conduct. For example, the maximum penalty tiers would essentially become true maximums, resulting in penalties that do little to deter against conduct that results in millions of dollars of damage or disgorgement. Moreover, this approach would equate one-time violations with those that occurred over a span of multiple years. To be effective, this approach would have to be paired with statutory change, perhaps by drastically raising the numbers enumerated in the tiers. This would only magnify the problems with too much ALJ discretion.

198. See *supra* notes 74–79 and accompanying text.

Basing penalties off distinct acts of negligence also does not adequately reflect the harm done. As discussed earlier, the interconnectedness of the market can make one act disastrous to investors.¹⁹⁹ And although ALJs often tailor the punishment to address less impactful “acts” by making the penalty per act smaller, an act-based structure does not address acts that are disproportionately harmful, such as Elon Musk’s deceptive tweet.

The number of investors injured could be an appropriate proxy in cases where fraudsters have direct contact with those investors—like a fund manager who advertises fraudulent returns to induce investment—but in an exchange- or market-based fraud, where an entire market base is impacted, that number loses touch with the actual severity of the crime.

B. Congressional Action

Congress should therefore pick a new criterion for penalty amounts. A proper framework would establish a uniform metric to provide a basis of certainty for market participants, while also presenting flexibility to fit new forms of misconduct and granting judges the ability to account for subjective factors. A revenue-centric system would effectively balance these goals.

Finding an appropriate metric for severity is key to a consistent penalty framework.²⁰⁰ When Congress first granted the SEC the power to impose fines on wrongdoers, it recognized that the amount of profit gained—or avoided—and the amount of investor harm were appropriate barometers for the severity of misconduct.²⁰¹ To that end, it imposed penalty caps that were based on those numbers.²⁰² And even though Dodd-Frank did not continue that practice for ALJs—Congress decided to rely exclusively on the tiers—some adjudicators still implicitly recognize the amount of disgorgement as a measure of severity, declining to impose penalties that exceed disgorgement.²⁰³ Therefore, returning to a system that formally uses those numbers as the baseline measure for penalties would be an intuitive switch and

199. See *supra* notes 166–73 and accompanying text (discussing the connectivity of the financial system and how financial models are closely linked to market movements).

200. See Cooter, *Punitive Damages*, *supra* note 120, at 74 (“Consistency requires mapping wrongs ordered by seriousness into punishments ordered by severity.”).

201. See *supra* notes 46, 49 and accompanying text (describing how penalties were tied to pecuniary gain in a number of congressional acts over the years).

202. See *supra* notes 46, 49 and accompanying text.

203. See *supra* note 88 and accompanying text.

would provide a more accurate, definite, and predictable system of punishment.

England, for example, has a system based on this principle that varies substantially from the Dodd-Frank approach. Its penalty system is administered by the Financial Conduct Authority (“FCA”), which—along with the Prudential Regulation Authority—regulates banking and capital markets in the U.K. Unlike their American counterpart, each entity has extensive instructions that dictate how they should calculate penalties.²⁰⁴ FCA penalties have two segments: disgorgement and an additional financial penalty.²⁰⁵ The financial penalty is an assessment of the “seriousness of the breach.”²⁰⁶ In most cases, this penalty is a percentage of the revenue earned by the violating firm.²⁰⁷ The FCA uses revenue, instead of disgorgement, to measure the sanction, but the basic principle remains the same.

Although it seems that the FCA would encounter a similar issue as American adjudicators in defining what a “breach” is, it calculates the revenue by consolidating benefits earned for the entire “period” of the breach.²⁰⁸ Once the FCA has established the total revenue for the period, it uses a comprehensive list of subjective factors to determine an appropriate percentage ranging from 0 percent to 20 percent.²⁰⁹ “The more serious the breach, the higher the level.”²¹⁰ The FCA can then adjust the total penalty using a series of aggravating and mitigating factors, as well as a “deterrence factor.”²¹¹ To summarize in terms of current ALJ approaches, the FCA first establishes the total benefit earned from the course of conduct that violates the securities laws and then multiplies that number by a percentage that equates to the severity of the crime.

204. See UK FIN. CONDUCT AUTH., THE DECISION PROCEDURE AND PENALTIES MANUAL § 6.5 (Apr. 2019) [hereinafter UK FIN. CONDUCT AUTH., THE MANUAL], <https://www.handbook.fca.org.uk/handbook/DEPP/6.pdf> [<https://perma.cc/VFV4-MLCU>] (outlining the FCA’s penalty-setting regime).

205. *Id.* § 6.5.3 (“The total amount payable by a person subject to enforcement action may be made up of two elements: (i) disgorgement of the benefit received as a result of the breach; and (ii) a financial penalty reflecting the seriousness of the breach.” (emphasis omitted)).

206. *Id.* (emphasis omitted).

207. *Id.* § 6.5A.2.

208. See *id.* § 6.5A.2(2) (“Where the breach lasted less than 12 months, or was a one-off event, the relevant revenue will be that derived by the firm in the 12 months preceding the end of the breach.” (emphasis omitted)).

209. *Id.* § 6.5A.2(3).

210. *Id.* (emphasis omitted).

211. *Id.* § 6.5A.3–4.

One critical benefit of this approach is that it strikes a desirable balance between objective and subjective factors. Although adjudicators retain sufficient discretion to address egregious cases, the fact that the “base” number is one that is objectively measured by calculating the revenues earned can significantly reduce variability. And it does not impose any additional burden on the SEC because that calculation is not so different from how the SEC currently ascertains disgorgement numbers.²¹² The ALJ can still exercise discretion when applying the factors to determine the percentage multiplier, as well as when applying the additional aggravating and mitigating factors. A few of the many factors that the FCA uses are the frequency or repetition of the conduct, whether the conduct was intentional, remedial steps taken or cooperation with authorities, and the defendant’s prior disciplinary record.²¹³ But Congress and the SEC would be free to form the list as they please and could incorporate the factors currently used to identify the appropriate tier. These factors would give the agency enough latitude to address unique facts of peculiar cases while grounding the number within an objective criterion that can only vary within a preset range.

This approach might struggle to address cases in which little to no financial benefit is earned from the violation. Elon Musk did not significantly profit off his actions, yet he caused serious damage to investors. The FCA addresses these situations imperfectly. In cases where the total revenue is not discernible, it has the authority to choose another metric aside from revenues.²¹⁴ This can result in some varied judgments depending on the metric selected,²¹⁵ but the variation is still

212. See *SEC v. First City Fin. Corp.*, 890 F.2d 1215, 1231 (D.C. Cir. 1989) (“[D]isgorgement need only be a reasonable approximation of profits causally connected to the violation.”).

213. UK FIN. CONDUCT AUTH., *THE MANUAL*, *supra* note 204, § 6.5A.2.

214. See UK FIN. CONDUCT AUTH., *THE MANUAL*, *supra* note 204, § 6.5A.2(1) (“However, the FCA recognises that there may be cases where revenue is not an appropriate indicator of the harm or potential harm that a firm’s breach may cause, and in those cases the FCA will use an appropriate alternative.” (emphasis omitted)). Ironically, in one recent case about reporting requirements, the FCA used the number of reporting mistakes to arrive at the appropriate revenue. UK FIN. CONDUCT AUTH., *FINAL NOTICE TO GOLDMAN SACHS INTERNATIONAL* (Mar. 27, 2019), <https://www.fca.org.uk/publication/final-notice/goldman-sachs-international-2019.pdf> [<https://perma.cc/S8GN-YWGC>].

215. *The FCA’s “New” Penalties Regime – How It Is Being Implemented in Practice*, KING & WOOD MALLESONS (Nov. 21, 2013), <https://www.kwm.com/en/uk/knowledge/insights/the-fcas-new-penalties-regime-how-it-is-being-implemented-in-practice-20160101> [<https://perma.cc/V5Y5-QWB2>] (noting that although the FCA has primarily used “relevant revenue/relevant income” as the indicator of harm, the FCA has also relied on its Decision Procedures and Penalties Manual § 6.5A(13) to apply “alternative figure[s]” in a number of cases).

less than under a per-violation system. The total amount estimated would remain within a fairly predictable range. An optimal framework would still severely limit such discretion to reduce variability, however. To address these situations, an alternative provision could allow the use of total of investor harm, instead of revenue earned, in certain scenarios.²¹⁶

CONCLUSION

Congress's adoption of a penalty framework from 1990 was a shortsighted decision, as this outdated method fails to address the injection of widely used algorithmic trading into the industry. The already ambiguous language has become untenable, granting the ALJs too much discretion in the sanctioning process and forcing them to disregard statutory language if they hope to punish wrongdoers adequately. The imprecise framework also results in unpredictable and incomprehensible penalty calculations that incentivize excessive settlement rates and could stymie desirable behavior. Because the "act or omission" standard cannot provide sufficient uniformity, Congress should alter the framework to calculate penalties based on a percentage of revenues earned through securities violations, similar to the U.K.'s FCA. A revenue-based methodology provides for greater legal certainty, which can lead to appropriate allocation of compliance funding and efforts. Because settlements occur for a variety of financial and reputational reasons, this author cannot ensure that a new penalty-calculation methodology will cause those rates to fall. However, it is clear that the settlement economics under a revenue-based scheme will be more lucid, allowing defendants to make more informed decisions in negotiations with the government.

216. It is possible that the level of investor harm is minimal as well but that a violation still occurs. The appropriate metric for severity in unique situations like this is something that will have to be borne out in future cases and scholarship.